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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,198	06/20/2002	Jean-Marie Girault	DN1999093USA	9989
7590	11/23/2004			
Howard M Cohn Bruce Hendricks Department 823 The Goodyear Tire & Rubber Company 1144 East Market Street Akron, OH 44316-0001			EXAMINER FISCHER, JUSTIN R	
			ART UNIT 1733	PAPER NUMBER

DATE MAILED: 11/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/088,198

Applicant(s)

GIRAULT ET AL.

Examiner

Justin R Fischer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 29-37 is/are allowed.
- 6) ☒ Claim(s) 21,22,24,26,27 and 38-40 is/are rejected.
- 7) ☒ Claim(s) 23,25 and 28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 21, 22, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gummiwerke (GB 867,103, of record) in view of Mechanics of Pneumatic Tires (Page 373, of record). Gummiwerke and Mechanics are applied in the same manner as set forth in the Non-Final Rejection mailed on May 17, 2004.

As best depicted in Figure 1, Gummiwerke discloses a pneumatic tire construction designed to operate more efficiently during an underinflated or runflat condition, wherein said tire includes a wedge insert or stiffener 3 disposed on an inner surface of each sidewall portion. The stiffener of Gummiwerke includes a plurality of intervening circumferential grooves or cuts 9 that separate said stiffener into adjacent segments (reference characters 4-8) that cooperate with one another, wherein the outer surface of a segment and the inner surface of an adjacent segment intersect at a point (segments have the capability of pivoting in an analogous manner to the claimed invention). Gummiwerke, however, is completely silent to the additional features of the tire, particularly the makeup of the carcass. While not expressly depicted by Gummiwerke, the carcass represents a fundamental tire component formed of the primary structural reinforcing elements and one of ordinary skill in the art at the time of

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the invention would have readily appreciated and expected the tire of Gummiwerke to include a carcass structure. Furthermore, the specific selection of a radial carcass construction would have been obvious to one of ordinary skill in the art at the time of the invention since it represents the most common and well known carcass arrangement used in the manufacture of modern day tires, as shown for example by Mechanics (Page 373).

As to claim 22, Figure 1 of Gummiwerke clearly depicts a saw tooth construction in which the respective surfaces (inner and outer surfaces of the segments) are flat.

With respect to claims 24, the cuts or grooves 9 close during an underinflated or runflat condition (Page 2, Lines 65-70).

3. Claims 26, 27, and 38-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gummiwerke and Mechanics as applied in claims 21 and 29 above and further in view of Kamegawa (JP 3-104710, of record). Gummiwerke, Mechanics, and Kamegawa in the same manner as set forth in the Non-Final Rejection mailed on May 17, 2004.

As noted in the previous paragraph, Gummiwerke is directed to a runflat tire construction having a rubber member or stiffener, wherein said stiffener contains a plurality of cuts or grooves that define segments. In describing the tire, Gummiwerke suggests a tubeless tire construction, which is recognized as referring to a tire without an inner tube (Page 2, Lines 9-19). Although Gummiwerke fails to expressly describe an innerliner, it is extremely well known that an innerliner is a fundamental component of tubeless tires and is extensively provided in order to reduce the amount of air in the

tire structure (promotes air impermeability). In essence, a tubeless tire contains an innerliner in place of an inner tube to provide the function of limiting the amount of air in the tire structure. One of ordinary skill in the art at the time of the invention would have expected the "tubeless tire" of Gummiwerke to include an innerliner in view of the description as such. Kawabata provides one example of a similar runflat tire construction in which a well-known innerliner is provided. It is noted that the runflat member of Kawabata similarly has grooves or indentations at its axially inner surface- in this instance, the innerliner conforms to the geometry of the runflat member and is existent over the inner and outer surfaces that surround a given indentation.

Additionally, one of ordinary skill in the art at the time of the invention would have found it obvious to position the innerliner outward of the runflat member as it is well known in the tire industry to place reinforcing members within the tire cavity. It is emphasized that Gummiwerke only requires that the rubber stiffener is attached to the inside of the sidewalls of a tubeless tire- the rubber stiffeners would provide the same reinforcing capabilities if they were attached to the innerliner or if they were attached to the carcass structure. Absent any conclusive showing of unexpected results, one of ordinary skill in the art at the time of the invention would have found it obvious to include an innerliner in the tubeless tire of Gummiwerke and furthermore, would have found it obvious to position the innerliner inwards or outwards of the rubber stiffener as each construction defines well known arrangement in the tire industry.

Allowable Subject Matter

4. Claims 29-37 are allowed. The following is an examiner's statement of reasons for allowance: the prior art references of record failed to suggest, disclose, or teach the inclusion of saw-tooth shaped stiffening member in a tire structure, wherein the surfaces that define the saw-tooth assembly are non-flat.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Claims 23, 25, and 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments filed September 9, 2004 have been fully considered but they are not persuasive. It is initially noted that the rejections of claims 23, 25, and 28-37 have been withdrawn in light of applicant's arguments (Pages 10-11).

As to the additional arguments, applicant contends that the stiffener of Gummiwerke is divided into individual ribs as opposed to that of the claimed invention in which the stiffener is one piece. It is the examiner's position that the cut or divided stiffener of Gummiwerke is analogous to that of the claimed invention since the respective ribs are described as cooperating with one another. A fair reading of Gummiwerke suggests that the cuts extend through the thickness of the stiffener and

intersect at the axially outer surface, this intersection representing the hinge point. As acknowledged by applicant, the length of the surfaces (defined by the cuts) can extend the thickness of the insert or less as desired. It is not believed that the description of a "single circumferentially disposed" insert excludes the intersection of the cuts at the axially outer surface of the insert or stiffener. In fact, dependent claim 28 is intended to further limit the generic structure of claim 21, such that the description of cuts extending less than the thickness of the insert further defines the generic structure of claim 21. It is further noted that the claims are directed to a tire article and after vulcanization, adjacent portions of the cut or divided ribs would be expected to form an integrated structure due to flow of the rubber during vulcanization.

As to the inclusion of an inner liner, Gummiwerke describes a tubeless tire construction, which is predominantly recognized in the tire industry as defining a tire having an inner liner as opposed to an inner tube. One of ordinary skill in the art at the time of the invention would have readily appreciated the placement of the inner liner inward of or outward of the reinforcement member. Kamegawa provides one example of a similar tire construction in which an innerliner is disposed inward of the reinforcing member, it being recognized that either placement of the inner liner would have been well within the purview of one of ordinary skill in the art at the time of the invention absent any conclusive showing of unexpected results.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Justin R Fischer** whose telephone number is **(571) 272-1215**. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Justin Fischer

November 19, 2004


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SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700